

Application No. 10/674,971
Amendment dated August 9, 2007
Reply to Office Action of February 20, 2007

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REMARKS

Applicant amended independent claims 29 and 39 and added claims 58-61 to further define Applicant's claimed invention. Support for the amendment to independent claims 1 and 76 and to dependent claims 60 and 61 can be found at least on page 2, lines 13-16, page 9, lines 14-18, and page 15, lines 3-16 of the specification, and in FIG. 6C of the application. Support for new claims 58 and 59 can be found in the specification at least on page 21, lines 17-19, and Figs. 6C and 9 of the application.

In the Office Action, the Examiner rejected claims 35 and 46 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant respectfully traverses the rejection. The present application (at page 16, lines 5-6), and U.S. application serial no. 09/263,266 (at page 16, lines 5-6) to which this application claims priority, each incorporate by reference U.S. Patent No. 5,593,409 ("409 patent"). The sub-step of drilling the opening as recited in claims 35 and 46 is supported at least by the '409 patent in col. 3, lines 16-18, col. 8, lines 46-48, col. 10, lines 53-67, and col. 12, lines 25-27. Applicant amended the specification to include the subject matter associated with claims 35 and 46 from the application and the '409 patent incorporated by reference. Applicant submits that the rejection of claims 35 and 46 under 35 U.S.C. § 112, first paragraph, has been overcome.

The Examiner rejected claims 29-34, 36, 38, 41, 50, 51, 54, and 56 under 35 U.S.C. § 102(b) as being clearly anticipated by French Patent No. FR 2727003 A1 to Tisserand ("Tisserand"). Applicant amended independent claim 29 to recite that the upper and lower surfaces of the implant are at least arcuate in part "in a plane transverse to a mid-longitudinal axis of the implant." No such structure or method is disclosed or suggested by Tisserand.

FIGS. 1 and 3 of Tisserand show that the upper and lower surfaces of the insert are linear in a plane transverse to a mid-longitudinal axis of the insert. Applicant respectfully traverses the Examiner's contention that "[t]he grooves 1i and the screws 2 and 3 define arcuate portions of upper and lower implant surfaces." (Office Action, page 3, lines 2-4). The ridges (projections) 1i, 1j on the upper and lower surfaces in

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Tisserand are formed by straight lines and are generally triangular in shape. (See FIGS. 1 and 3). The screws 2 and 3 in Tisserand pass through openings in the upper and lower surfaces of the insert and are not part of the upper and lower surfaces of the insert.

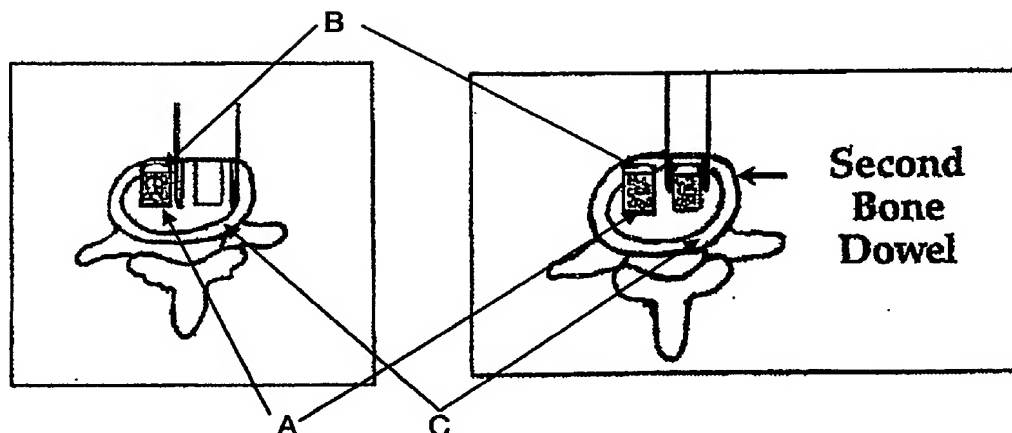
Applicant submits that the rejection of independent claim 29 under 35 U.S.C. § 102(b) over Tisserand has been overcome. The rejection of claims 30-34, 36, 38, 41, 50, 51, 54, and 56 has been overcome at least because these claims depend from an allowable independent claim, or claims dependent therefrom.

The Examiner rejected claims 29, 30, 33-36, 39-41, 44-47, and 50-57 under 35 U.S.C. § 102(b) as being clearly anticipated by *Sofamor Danek Laparoscopic Bone Dowel System: Laparoscopic Surgical Procedure* (1995) ("Sofamor"). Applicant amended independent claims 29 and 39 to recite that the implant has "a length between the leading and trailing ends adapted to allow at least a portion of the leading end and at least a portion of the trailing end to be seated on the peripheral rim of the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies," and the step of "positioning the leading end and the trailing end" of the implant "so that at least a portion of the leading end and at least a portion of the trailing end of each implant between the medial side and the mid-longitudinal axis of the implant are seated on the peripheral rim of the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies and do not substantially protrude from the spine." No such structure or method is disclosed or suggested by Sofamor.

Sofamor discloses several embodiments of spinal implants. Two representative drawings taken from page 15 of Sofamor are reproduced below. The drawings below illustrate that the implants have a length between a leading end (arrow A) and a trailing (arrow B). Sofamor shows that only a portion of the trailing end (arrow B) is seated on the peripheral rim (arrow C) of the vertebral body. Sofamor does not disclose or suggest an implant having a length adapted to allow at least a portion of both the leading end and the trailing end to be seated on the peripheral rim of the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies as recited in independent

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claims 29 and 39.



Applicant submits that the rejection of independent claims 29 and 39 under 35 U.S.C. § 102(b) over Sofamor has been overcome. The rejection of claims 30, 33-36, 39-41, 44-47, and 50-57 is rendered moot at least because these claims depend from an allowable independent claim, or claims dependent therefrom.

The Examiner has rejected claims 35 and 37 under 35 U.S.C. § 103(a) as being unpatentable over Tisserand and rejected claims 31, 32, 37, 38, 42, 43, 48, and 49 under 35 U.S.C. § 103(a) as being unpatentable over Sofamor. Applicant submits that the rejection of claims 31, 32, 35, 37, 38, 42, 43, 48, and 49 is rendered moot because these claims depend from an allowable independent claim, or claims dependent therefrom.

Applicant submits that independent claims 29 and 39 are patentable and that dependent claims 30-38 and 40-61 dependent from one of independent claims 29 and 39, or claims dependent therefrom, are patentable at least due to their dependency from an allowable independent claim.

In view of the foregoing remarks, it is respectfully submitted that the claims, as amended, are patentable. Therefore, it is requested that the Examiner reconsider the outstanding rejections in view of the preceding comments. Issuance of a timely Notice of Allowance of the claims is earnestly solicited.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain

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entry of this reply, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 50-3726.

Respectfully submitted,

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Dated: August 9, 2007

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